

Fiscal Year 2000 Alaska District Success Stories Pre-WWII Tank Farm Area FUDS /Dutch Harbor C3 Zone





HAVE System

FUDS PROPERTY NAME: Pre-WWII Tank Farm Area

FUDS No.: F10AK084103

LOCATION: Amaknak Island, Alaska

PROJECT DESCRIPTION

The Pre WWII Tank Farm Area is located on Amaknak Island, near Rocky Point. The tank farm was constructed in the early 1920s and dismantled during WWII after the Japanese bombed Dutch Harbor in 1942. The result was Bunker C fuel oil being drained on the ground, which is still there today.

In FY 2000, the USAED began thermal treatment of approximately 12,500 cubic yards of soil in this area. The USAED is using a hot-air vapor extraction (HAVE) system to treat the Bunker C contaminated soil. The HAVE

system injects high temperature air (900-1,000 degrees Fahrenheit) into an enclosed treatment stack via perforated piping. The Bunker C contamination is driven off the soil and extracted out of the stack and treated prior to release to the atmosphere. The resulting emissions meet all regulatory requirements.

COST SAVINGS

The USAED saved approximately \$800,000 on this program to date by using the HAVE system as compared to a thermal desorption unit. The USAED performed a treatibility study to determine the best thermal treatment method to use at the Pre-WWII Tank Farm. Based on the results of the treatibility study, which factored in both technical viability and cost, the HAVE technology was chosen as the preferred alternative. This resulted in approximately \$800,000 in savings when HAVE technology was compared to the thermal desorption technology.

SCHEDULE SAVINGS

Other cost savings include shared management and resources with other FUDS in the Dutch Harbor C3 Zone. The schedule for the HAVE technology take longer than other, more direct technologies. At the current time, treatment of the soils in this area is behind schedule, but the cost savings of \$800,000 will still be realized.

OTHER PROJECT SUCCESSES

By using the HAVE technology, work can be performed on the Pre-WWII Tank Farm Area. This mitigates the transport of contaminated soils from the site to another location where the treatment unit would have to be located. This allows for minimal migration of contamination off site. In addition, the impact to the surrounding community is minimal, since the system operates quietly and there is less heavy equipment operating at the site, reducing noise, dust, and traffic in the community.

PUBLIC INVOLVEMENT:

The USAED is involving this site into the ongoing community relations program at Dutch Harbor for other FUDS work. These activities include quarterly public meetings and bi-weekly conference calls with local community stakeholders such as Ounalashka Corporation, the Qawalangan Tribe, and the city of Unalaska. These activities include the local stakeholders in all decisions made for this site and others in the Dutch Harbor area. These activities also include state regulators such as the Alaska Department of Environmental Conservation. This allows the community to hear all concerns regarding the status of the projects.



Pre-WWII Tank Farm Vicinity



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NATURE OF SUCCESS

Using a technology such as the HAVE has mitigated concerns regarding transpiration of contaminated soil around Dutch Harbor. In addition, the HAVE technology is quiet and can operate with little impact of the local community. Cost savings of \$800,000 are also a major contributor to the success of this project.

POINT OF CONTACT

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